

AMENDMENTS TO THE CLAIMS

Claims 1-75. (Canceled)

76. (Currently Amended) An integrated circuit structure, comprising:

a first insulating layer comprising SILK material with a dielectric constant of about 2.65 at 100 kHz provided over a semiconductor substrate and contacting at least a portion of a metal layer provided within said semiconductor substrate, said first insulating layer having a thickness of about 4,000 Angstroms to about 30,000 Angstroms;

a second insulating layer comprising NANOGLASS material with a dielectric constant of about 3.5 at 100 kHz provided over and in contact with said first insulating layer, said second insulating layer having a thickness of about 100 Angstroms to about 2,000 Angstroms; and

at least a first opening within said first insulating layer, said first opening having a first portion with a first width and a second portion with a second width, said first width being different from said second width, ~~said at least first opening being formed by time etching of at least one of said first and second insulating layers with a first etch chemistry.~~

77. (Currently amended) The integrated circuit structure of claim 76 further comprising a third and fourth insulating layers with a dielectric constant lower than 4.0 provided over said second insulating layer; and

at least a second opening within said third ~~and fourth~~ insulating layer[[s]], said second opening having a third portion with a third width and a fourth portion with a fourth width, said third width being different from said fourth width ~~being formed by time etching of at least one of said third and fourth insulating layers with a second etch chemistry.~~

78. (Previously presented) The integrated circuit structure of claim 77, wherein said third and fourth insulating layers are formed of different materials which can be selectively etched relative to each other.

79. (Previously presented) The integrated circuit structure of claim 77, wherein said third and fourth insulating layers comprise organic material.

80. (Previously presented) The integrated circuit structure of claim 79, wherein said organic material is selected from the group consisting of polyimide, spin-on-polymers, flare, polyarylethers, parylene, polytetrafluoroethylene, benzocyclobutene and SILK material with a dielectric constant of about 2.65 at 100 kHz.

81. (Previously presented) The integrated circuit structure of claim 77, wherein said fourth insulating layer comprises SILK material with a dielectric constant of about 2.65 at 100 kHz and said third insulating layer comprises NANOGLASS material with a dielectric constant of about 3.5 at 100 kHz.

82. (Previously presented) The integrated circuit structure of claim 77, wherein said third and fourth insulating layers comprise inorganic material.

83. (Previously presented) The integrated circuit structure of claim 82, wherein said inorganic material is selected from the group consisting of fluorinated silicon oxide, hydrogen silsesquioxane and NANOGLASS material with a dielectric constant of about 3.5 at 100 kHz.

84. (New) An integrated circuit structure, comprising:
a first insulating layer with a dielectric constant lower than 4.0 provided over a semiconductor substrate and contacting at least a portion of a metal layer provided within said semiconductor substrate;

a second insulating layer with a dielectric constant lower than 4.0 provided over and in contact with said first insulating layer; and

at least a first opening within said first insulating layer, said first opening having a first portion with a first width and a second portion with a second width, said first width being different from said second width, and

wherein said first and second insulating layers are formed of materials which can be selectively etched relative to each other.

85. (New) The integrated circuit structure of claim 84, wherein said first and second insulating layers comprise organic material.

86. (New) The integrated circuit structure of claim 85, wherein said organic material is selected from the group consisting of polyimide, spin-on-polymers, flare, polyarylethers, parylene, polytetrafluoroethylene, benzocyclobutene and SILK material with a dielectric constant of about 2.65 at 100 kHz.

87. (New) The integrated circuit structure of claim 84, wherein said first and second insulating layers comprise inorganic material.

88. (New) The integrated circuit structure of claim 87, wherein said inorganic material is selected from the group consisting of fluorinated silicon oxide, hydrogen silsesquioxane and NANOGLASS material with a dielectric constant of about 3.5 at 100 kHz.

89. (New) The integrated circuit structure of claim 84 further comprising a third and fourth insulating layers with a dielectric constant lower than 4.0 provided over said second insulating layer; and

at least a second opening within said third insulating layer, said second opening having a third portion with a third width and a fourth portion with a fourth width, said third width being different from said fourth width.

90. (New) The integrated circuit structure of claim 89, wherein said third and fourth insulating layers are formed of different materials which can be selectively etched relative to each other.

91. (New) The integrated circuit structure of claim 90, wherein said third and fourth insulating layers comprise organic material.

92. (New) The integrated circuit structure of claim 91, wherein said organic material is selected from the group consisting of polyimide, spin-on-polymers, flare, polyarylethers, parylene, polytetrafluoroethylene, benzocyclobutene and SILK material with a dielectric constant of about 2.65 at 100 kHz.

93. (New) The integrated circuit structure of claim 89, wherein said third and fourth insulating layers comprise inorganic material.

94. (New) The integrated circuit structure of claim 93, wherein said inorganic material is selected from the group consisting of fluorinated silicon oxide, hydrogen silsesquioxane and NANOGLASS material with a dielectric constant of about 3.5 at 100 kHz.